

PROCEEDINGS
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NINE NEW SPECIES OF PLANTS FROM CENTRAL
AMERICA.¹

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The trees and shrubs described in the present paper were collected mostly by the writer during a visit to Quiriguá and Puerto Barrios, Guatemala, during the early summer of 1922. There are included also descriptions of a new species of *Psychotria* obtained by Mr. William R. Maxon during a recent visit to Costa Rica, and of two representatives of the genus *Coussapoa* from Costa Rica.

Podocarpus guatemalensis Standl., sp. nov.

Branchlets rather slender, the leaves distant; terminal buds small, the outer scales acute, the inner obtuse; leaves thin-coriaceous, lance-linear and elongate, 9.5-15 cm. long, 8-12 mm. wide, long-attenuate to the apex, acute or short-attenuate at base and sessile, somewhat lustrous, green above, slightly paler beneath, the costa slender, prominent on both surfaces, not sulcate above.

Type in the U. S. National Herbarium, no. 1,150,683, collected in wet thicket at Puerto Barrios, Guatemala, at sea level, June, 1922, by Paul C. Standley (no. 25090).

Of all the numerous interesting plants collected by the writer on the north coast of Guatemala in 1922, this is doubtless the most interesting, important, and perplexing. The species of *Podocarpus* are inhabitants of the high mountains, and so far as may be learned from consultation of literature, including the monograph of the genus published in Engler's *Pflanzenreich* by Pilger in 1903, they are never found in tropical regions at sea level. Three species are known from Central America, all occurring in Costa Rica (one also in Panama) at elevations of 1,700 to 2,400 meters. The Guatemalan plant, consequently, represents a considerable extension of range for the genus northward upon the continent, but it is much more remarkable because of its occurrence in a coastal thicket or swamp.

The specimens obtained were taken from a shrub of two meters, which, of

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course, was sterile. The writer did not recognize its genus at the time of collection, but took the specimens because it seemed probable that the distinctive form of the leaves would make them easy of determination. No other individual was seen, but the collecting trip upon which the specimens were obtained was a hurried one, and it is likely that careful search might have revealed other plants.

It scarcely seems probable that the coastal thickets at Puerto Barrios can be a natural habitat for a species of *Podocarpus*, yet it is not easy to explain the accidental occurrence of a plant of the genus there, if it be accidental. No species is known from the mountains of Guatemala, from which seeds might have been carried. Although the land about Puerto Barrios consists largely of swamps, these swamps are not connected with the Río Motagua, which empties into the sea some miles away, in such a fashion that seeds might have been brought from some higher elevation. The occurrence of the plant in this region thus remains a botanical anomaly, which it may be possible some day to solve, and perhaps not.

In view of the fact that the type material of *P. guatemalensis* was taken from a juvenile plant, it is probable that the leaf characters are somewhat different from those of the mature plant, although this is not necessarily the case. The leaves are most like those of *P. coriaceus* Rich., which occurs in Porto Rico, the Lesser Antilles, Trinidad, Venezuela, and Colombia, but in that the costa of the leaf is conspicuously sulcate on the upper surface. The leaves resemble also those of *P. oleifolius* Don, which grows in the high mountains of Costa Rica and Panama, and also in Peru, but they are somewhat longer and narrower, and in that species also the costa is sulcate on the upper surface.

It may be that when better material of the Guatemalan plant is obtained, it will be found that it is identical with one of the species mentioned. It is not a good policy to describe new species from such incomplete material, but the occurrence of the present plant offers so many features of interest that it is desirable to give it a name for purposes of reference.

***Coussapoa nymphaeifolia* Standl., sp. nov.**

Young branchlets very thick, glabrate; stipules about 2 cm. long, densely covered with brown subappressed hairs; petioles stout, 8–12 cm. long, finely puberulent; leaf blades oval or ovate-oval, 23–28 cm. long, 18–21 cm. wide, broadly rounded at apex, cordate at base, with a narrow sinus 2–3 cm. deep, slightly roughened above, pubescent beneath with short spreading hairs, the lateral nerves 10 or 11 on each side, nearly straight; staminate heads 6–8 mm. broad, about 6 in each pedunculate cyme, borne on stout peduncles; pistillate heads mostly geminate, sessile, solitary in the leaf axils, in fruit about 2 cm. broad, with very numerous flowers.

Type in the U. S. National Herbarium, no. 473,945, collected at Buena Vista, road to San Carlos Valley, Costa Rica, altitude 600 meters, April 16, 1903, by O. F. Cook and C. B. Doyle (no. 157). Also collected in Panama by Sutton Hayes (no. 354).

The nearest relative is *C. brevipes* Pittier, of the San Blas Coast of Panama, but in that the leaves are rounded at base.

Coussapoa parviceps Standl., sp. nov.

Branchlets stout, glabrous; stipules about 1 cm. long, oblong-lanceolate, sparsely and minutely appressed-pubescent, acute; petioles slender, 2-3.5 cm. long, glabrous; leaf blades oval, about 16 cm. long and 10 cm. wide, rounded and abruptly short-pointed at apex, rounded or obtuse at base, coriaceous, glabrous, with usually 6 pairs of lateral nerves; pistillate heads numerous, cymose-paniculate, 3-4 mm. in diameter, few-flowered, the peduncles 12 mm. long or less, stout, obscurely puberulent.

Type in the U. S. National Herbarium, no. 799,413, collected in the Valle de Agua Buena, Cafias Gordas, Costa Rica, altitude 1,100 meters, February, 1897, by H. Pittier (no. 11166).

Related to *C. latifolia* Aubl., of French Guiana, as which the type material was determined, but Aublet's plate shows a plant with much larger pistillate heads.

Only one species of *Coussapoa*, *C. rekoii* Standl., has been reported from Mexico. There is, however, in the National Herbarium a specimen of a second species, *Purpus* 5996, from Zacuapan, Veracruz, distributed as "*Brosimum?*" This specimen is in very poor condition, with immature leaves and staminate inflorescence. So far as may be told from the specimen, the Mexican plant may well be the same as *C. parviceps*. It seems probable that the Mexican tree may belong to a distinct species, but until better material has been obtained, it does not seem advisable to give it a name.

Neea stenophylla Standl., sp. nov.

Shrub, about 1 m. high, the branchlets slender, terete, glabrous, or when very young obscurely and sparsely puberulent; leaves mostly opposite but part of them ternate, the petioles stout, 2-4 mm. long, the blades narrowly lance-oblong, usually widest at the middle but sometimes widest above the middle, 5-10 cm. long, 1-2.3 cm. wide, long-acuminate, acute or obtuse at base, chartaceous, glabrous, the margins plane, the lateral nerves about 7 pairs but nearly obsolete; pistillate cymes about 8-15-flowered, on slender peduncles 12-18 mm. long, lax, very sparsely ferruginous-puberulent, the flowers red-brown, sessile or on pedicels 1 mm. long or less, the bracts minute; pistillate perianth tubular, 3 mm. long, sparsely and very minutely ferruginous-puberulent or glabrate.

Type in the U. S. National Herbarium, no. 1,150,653, collected in wet thicket at Puerto Barrios, Guatemala, at sea level, June, 1922, by Paul C. Standley (no. 25059).

The most closely related species is *N. psychotrioides* Donn. Smith, common in many parts of Central America, in which the leaves are usually much larger and comparatively broader, and on longer petioles.

Sparattanthelium guatemalense Standl., sp. nov.

Shrub or tree, 3-6 m. high, the branchlets slender, glabrous, terete; petioles very slender, 1.5-3.5 cm. long, glabrous; leaf blades oblong-lanceolate, herbaceous, 11-13.5 cm. long, 3-4.5 cm. wide, very long-acuminate, obtuse at base, glabrous, somewhat lustrous, 3-nerved, the two lateral nerves extending about two-thirds the distance to the apex and there

anastomosing with the 2 or 3 arcuate lateral nerves, the latter arising well above the middle of the blade; panicles axillary, slender-pedunculate, about 7 cm. long, many-flowered, the branches very slender, very minutely gray-puberulent, the pedicels puberulent, often twice as long but sometimes shorter than the calyx; calyx 4-parted, about 0.5 mm. long, minutely gray-puberulent.

Type in the U. S. National Herbarium, no. 1,150,660, collected in wet thicket at Puerto Barrios, Guatemala, at sea level, June, 1922, by Paul C. Standley (no. 25066).

The flowers are only in bud, although apparently about ready to open. The genus *Sparattanthelium*, of the family Hernandiaceae, has not been reported previously from North America. The seven or eight species are chiefly natives of Brazil, although some of them occur also in Peru, Bolivia, and French Guiana. The Guatemalan tree is closely related to the Brazilian species, but seems to differ in some character from each of them.

Capparis quiriguensis Standl., sp. nov.

Shrub or tree, 3-6 m. high, with a dense spreading crown, the branchlets terete, green, puberulent or finally glabrate; petioles slender, 3-12.5 cm. long, glabrous or sparsely puberulent; leaf blades mostly elliptic, sometimes oblong-elliptic, 11-23 cm. long, 4.5-14 cm. wide, acuminate, obtuse or rounded at base, thin, shining, bright green above, glabrous, with prominent venation, beneath paler, hirtellous along the nerves, at least when young, later glabrate; flowers greenish white, in terminal racemes 4-10 cm. long, the rachis stout, densely puberulent, the flowers few or numerous, on puberulent pedicels 2-4 cm. long; sepals imbricate in bud, oval or rounded-ovate, 5 mm. long, minutely puberulent and ciliolate-denticulate; petals broad, about 1 cm. long, glabrous; stamens numerous, white, about 3 cm. long; fruit (immature) subglobose or oblong, 3.5 cm. long or larger, narrowed or rounded at apex, smooth, many-seeded, borne on a stipe 2.5 cm. long.

Type in the U. S. National Herbarium, no. 1,139,713, collected in swamp at Quiriguá, Departamento de Izabal, Guatemala, altitude about 75 meters, May, 1922, by Paul C. Standley (no. 24048). No. 24598 from the same locality also represents this species.

Capparis tuerckheimii Donn. Smith, of Baja Verapaz, Guatemala, is closely related, but in that there is no pubescence, the sepals are narrower, the leaves relatively narrower, and the pedicels much longer.

Maieta glandulifera Standl., sp. nov.

Shrub, 2-3 m. high, the young branchlets glandular-hirsute, becoming glabrate; leaves of a pair somewhat unequal, the petioles stout, 3-5 cm. long, glandular-hirsute, bearing at the apex an inflated sack 1-2 cm. long, this glabrous or nearly so; leaf blades broadly elliptic to broadly oval, 21-25 cm. long, 12-15 cm. wide, cuspidate-acuminate, rounded at base, 5-nerved, finely and evenly serrate-dentate, each tooth ending in a stiff bristle, above deep green, thinly hispid with yellowish hairs, beneath much paler, rather densely hispidulous with short spreading hairs; inflorescence axillary, laxly paniculate, many-flowered, about 9 cm. long, the rachis glandular-hirsute and minutely puberulent, the flowers partly sessile and partly on pedicels

3–5 mm. long; fruit black, subglobose, 6 mm. in diameter, thinly glandular-hirsute; calyx lobes 5, broadly rounded and nearly obsolete; apex of the ovary bearing a broad lacerate-dentate flat spreading crown.

Type in the U. S. National Herbarium, no. 1,150,604, collected in swamp at Puerto Barrios, Guatemala, at sea level, June, 1922, by Paul C. Standley (no. 25002).

Very few specimens of this genus have been collected in Central America, except for the widely distributed *M. setosa* (Triana) Cogn. The present species is related to *M. guianensis* Aubl., but the relationship does not appear to be a close one.

***Hamelia longipes* Standl., sp. nov.**

Shrub, 2.5–3 m. high, glabrous throughout, the branches slender, with elongate internodes; stipules deltoid-acuminate, 3–4 mm. long; leaves opposite, the petioles slender, 2–3.5 cm. long, the blades elliptic or oval, 15–24 cm. long, 7–10.5 cm. wide, rather abruptly short-acuminate, rounded or obtuse at base, sometimes short-decurrent, thin, somewhat lustrous, concolorous, the lateral nerves about 10 pairs, arcuate; inflorescence terminal, cymose-corymbose, laxly many-flowered, the rachis and pedicels bright red, the pedicels slender, 6–11 mm. long; calyx and hypanthium 3 mm. long, the calyx lobes nearly obsolete, short and broadly rounded; corolla pale buff, 16–17 mm. long, tubular, very slightly ampliate above, the lobes very short, ovate-deltoid, erect.

Type in the U. S. National Herbarium, no. 1,150,447, collected in deep forest at Escoba, on the bay opposite Puerto Barrios, Guatemala, altitude about 150 meters, June 2, 1922, by Paul C. Standley (no. 24829).

Related to *H. chrysantha* Swartz, of Jamaica, in which the leaves are only half as large and the flowers only short-pedicellate.

***Psychotria maxonii* Standl., sp. nov.**

Epiphytic, the stems simple or sparsely branched, 12–25 cm. long, slender, glabrous, in age pale and lustrous, the internodes 5–17 mm. long; stipules intrapetiolar, united and forming a scarious persistent truncate sheath 1–1.5 mm. long; petioles 1–1.5 mm. long; leaf blades narrowly oblong-lanceolate, 13–18 mm. long, 2.5–4 mm. wide, acute or acuminate, acute at base, thick and succulent, glabrous, green above, pale beneath, the nervation obsolete; inflorescence glabrous, cymose, terminal and axillary, 6–8-flowered, the pedicels slender, 2–3 mm. long; hypanthium oval, 1 mm. long; calyx about 0.75 mm. long, 4-dentate, the teeth triangular-ovate, acute, erect; corolla tube 2.5–4 mm. long, the 4 lobes obtuse, about 1.5 mm. long; bracts minute and inconspicuous.

Type in the U. S. National Herbarium, no. 1,180,093, collected on mossy tree trunk, Santa Clara de Cartago, Costa Rica, altitude 1,950 meters, July 20, 1923, by William R. Maxon and Alfred D. Harvey (no. 8250).

Only two other species of epiphytic *Psychotrias* have been reported previously from continental North America, *P. parasitica* Swartz and *P. peperomia* Standl., both of which occur in the mountains of Panama.

Psychotria maxonii is strikingly different from both these in its diminutive size and in the small narrow leaves.